Curriculum Vitae

WASANA PRATCHAYASAKUL, Ph.D.

Office Address: Cardiac Electrophysiology Research and Training Center (CERT)
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EDUCATION

2011	Ph.D.(Physiology), Chiang Mai University, Chiang Mai Thailand
2005	M.Sc.(Physiology), Chiang Mai University, Chiang Mai Thailand
2000	B.Sc.(Nursing and Midwifery), Chiang Mai University, Chiang Mai Thailand

HONORS AND AWARDS

2018	Travel Fellowship Award from Alzheimer's Association, AAIC 2018 meeting, Chicago, USA
2018	TRF-OHEC-SCOPUS Young Researcher Awards, The Thailand Research Fund (TRF)
2014	International Travel Fellowship Award from International Society of Endocrinology, ICE/ENDO 2014 meeting, Chicago, USA
2012	Outstanding oral presentation, RGJ-Ph.D. Congress XIII, Chonburi, Thailand
2011	Outstanding oral presentation, the 2 nd Faculty of Medicine, CMU. Research Award, Chiang Mai, Thailand

2010	Outstanding oral presentation by Ph.D. student, the 39 th Annual Scientific Meeting of the Physiology Society of Thailand, Chonburi, Thailand
2008-2011	Scholarship from the Royal Golden Jubilee Ph.D. program (RGJ-Ph.D.), Thailand Research Fund under the Office of the Prime Minister, the Royal Thai Government, Thailand
2006	Fellowship from IBRO-ISN Neuroscience School @ NUS, National University of Singapore, Singapore
2000-2001	Scholarship from the Graduate School, Chiang Mai University, Chiang Mai, Thailand
1999	Outstanding Academic Achievement Award, Faculty of Nursing, Chiang Mai University, Chiang Mai, Thailand
1997	Outstanding Academic Achievement Award, Faculty of Nursing, Chiang Mai University, Chiang Mai, Thailand

PROFESSIONAL APPOINTMENT

2020-present	Associate Professor, Department of Physiology, Chiang Mai University, Chiang Mai, Thailand
2016-2019	Assistant Professor, Department of Physiology, Chiang Mai University, Chiang Mai, Thailand
2005-2015	Instructor, Department of Physiology, Chiang Mai University, Chiang Mai, Thailand
2005-present	Staff, Cardiac Electrophysiology Research and Training Center (CERT), Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

PROFESSIONAL LICENSE

2000 – Present	Nurse, Thailand.

ORGANIZATIONS AND PARTICIPATION

2017 – Present	The Alzheimer's Association
2007 – Present	The Endocrine Society
2007 – Present	Society for Neuroscience
2006 – Present	Thai Physiological Society

PRESENTATIONS AT INTERNATIONAL MEETINGS

July 2019	Alzheimer's Association International Conference, Los Angeles, California, USA
March 2019	9th Federation of the Asian and Oceanian Physiological Societies (FAOPS) Congress, Kobe, Japan
June 2018	Alzheimer's Association International Conference, Chicago, Illinois, USA
July 2017	Alzheimer's Association International Conference, London, UK
March 2016	ENDO 2016 : The Endocrine Society's 98th Annual Meeting, Boston, USA

June 2014	ICE/ENDO 2014: The Endocrine Society's 96th Annual Meeting Chicago, Illinois, USA
June 2013	ENDO 2013: The Endocrine Society's 95th Annual Meeting San Francisco, California, USA
April 2012	RGJ – Ph.D. Congress XIII, Chonburi, Thailand
November 2011	Neuroscience 2011, Washington DC, USA
November 2010	Neuroscience 2010, San Diego, California, USA
September 2010	RGJ seminar series LXXIV From Basic Biomedical Research to Sustainable Development, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
November 2007	Neuroscience 2007, San Diego, California, USA
July 2006	29 th Annual Meeting of the Japan Neuroscience Society, Kyoto, Japan
March 2006	Collegium Internationale Neuro-Psychopharmacologicum (CINP) Asia Pacific Regional Meeting , Pattaya, Thailand

PRESENTATIONS AT NATIONAL MEETINGS

May 2010	39 th Annual Scientific Meeting of the Physiology Society of Thailand, Chonburi, Thailand
April 2009	38 th Annual Scientific Meeting of the Physiology Society of Thailand, Petchaboon, Thailand
May 2008	37 th Annual Scientific Meeting of the Physiology Society of Thailand, Chonburi, Thailand
August 2004	4 th National Symposium on Graduate Research, Chiang Mai Thailand
May 2006	35 th Annual Scientific Meeting of the Physiology Society of Thailand, Chiang Mai, Thailand

ACADEMIC ACTIVITIES

Current Graduate Student Dissertation Committee for Ph.D. Program

1. Thura Tun Oo, MD., M.Sc. **Co-Advisor** (09/2020-present)
   Research area: Physiology (Neuroelectrophysiology)

PhD AND MSc GRADUATES

PhD Graduates:

1. Thazin Shwe M.D., M.Sc, **Co-Advisor** (12/2016-2020)
   Research area: Neurophysiology
2. Titikorn Chunchai, MSc. **Co-Advisor** (08/2016-2020)
   Research area: Neurophysiology
   RGJ Scholarship

3. Piangkwan Sa-nguanmoo, M.Sc. **Co-Advisor** (08/2014-10/2017)
   Research area: Neurohysiology
   CMU Scholarship
4. Hiranya Pintana, M.Sc. **Co-Advisor** (10/2012-04/2016)
   Research area: Neurophysiology

M.Sc. Graduates:

1. Busarin Arunsak, B.Sc. **Major Advisor** (08/2018-2020)
   Research area: Neurophysiology
2. Puntarik Keawtep, B.Sc. **Major Advisor** (08/2016-2018)
   Research area: Neurophysiology
3. Duangkamol Mantor, B.Sc. **Major Advisor** (02/2016-12/2017)
   Research area: Neurophysiology
4. Piangkwan Sa-nguanmoo, MSc. **Co-Advisor** (2012-2014)
   Research area: Physiology (Neuroelectrophysiology)

RESEARCH GRANT SUPPORT

06/2021-05/2024	The National Research Council of Thailand (Mid-Career Research Grant). "The effect of spermidine on gut dysbiosis, brain pathology and cognitive decline in estrogen-deprived rats with d-galactose-induced aging or obese-induced insulin resistance" (PI).
01/2022-12/2022	Fundamental Fund "The effects of Cyclosorus terminans extract on metabolic, cardiac and brain function in obese insulin-resistant rats" (PI).
11/2020-10/2021	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand. "The effects of Perilla seed oil on brain function in obese-insulin resistant rat" (PI).
10/2020-09/2023	The National Research Council of Thailand – Senior Research Scholar Grant "Neuropathophysiology and novel interventions in aging brain under obese condition: From mitochondria to man approaches." (Co-PI)
03/2020-02/2025	A NSTDA Research Chair Grant from the National Science and Technology Development Agency (NSTDA) "Development of novel therapeutic interventions using medical device and pharmacological therapies targeting mitochondria to prevent chemotherapy-induced cardiotoxicity and chemobrain: From bench-to-bedside investigations" (Co-PI)
04/2018-05/2021	The Thailand Research Fund (TRF) Grant (นักวิจัยรุ่นกลาง สกว.). "The comparative effects of proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor and atorvastatin on brain function in obese rats with and without estrogen" (PI).

PREVIOUS GRANT SUPPORT

07/2017-06/2020	The Thailand Research Fund (TRF) – Senior Research Scholar Grant "Neuropathophysiology of cognition in obesity: from cells to bedside" (Co-PI)
03/2015-02/2020	A NSTDA Research Chair Grant from the National Science and Technology Development Agency (NSTDA) "A cell-to-bedside research approach to study novel therapeutic strategies and indicator in metabolic syndrome and iron overload conditions to protect cardiac and brain dysfunction" (Co-PI)
06/2019-05/2020	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand. "Combined Effects of Dipeptidyl Peptidase-4 Inhibitor and Low-dose Testosterone Replacement on Brain Function and Cognitive Function in Obese-insulin Resistant Rats with Testosterone Deprivation" (PI).
05/2016-04/2018	The Thailand Research Fund (TRF) Grant (นักวิจัยรุ่นใหม่ สกว.). "The effects of calorie restriction and exercise training on brain function in ovariectomized obese rats" (PI).
01/2017-06/2018	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand. "The Effects of Estrogen Deprivation on Hippocampal Synaptic Plasticity and Cognitive Function in Obese Insulin Resistant Female" (PI).
06/2013-05/2015	The Thailand Research Fund (TRF) Grant (นักวิจัยรุ่นใหม่ สกว.). "Effects of the combined estrogen deprivation with obesity induced by high-fat diet consumption on neuronal insulin resistance, synaptic plasticity, cognition, brain oxidative stress and brain mitochondrial function" (PI).
01/2013-12/2013	Chiang Mai University Young Researcher Fund, Chiang Mai, Thailand. "Effects of estrogen administration on neuronal insulin resistance in long term high-fat fed ovariectomized rats" (PI).
04/2012-10/2013	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand. "Effect of Anti-Diabetic Drugs: Vildagliptin in rats with neuronal insulin resistance induced by 12-week high fat diet consumption" (PI).
06/2010-12/2012	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand. "Effect of rosiglitazone on hippocampal long term depression, brain insulin system dysfunction and amyloidosis in long term high-fat diets feeding rat" (Co-PI).
05/2008-04/2011	The Thailand Research Fund (TRF) Grant (เมธีวิจัย สกว.). "Effects of long-term high-fat diet on hippocampal synaptic plasticity in rats" (Co-PI).
10/2009-09/2010	National Research Council of Thailand. "The alteration of neuronal insulin receptor signaling and the promotion of amyloidosis in the rat brain following chronic high-fat diets ingestion" (Co-PI).

04/2008-11/2009 Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand. "Changes in nitric oxide synthase expression in hippocampus of rats with insulin resistance induced by high-fat diet" (PI).

07/2005-06/2008 The Thailand Research Fund (TRF) Grant (เมธีวิจัย สกว.). "Inhibition of cholinesterase activity in circulation and hippocampus in vivo following administration of *Tabernaemontana divaricata* extract" (Co-PI).

RESEARCH FIELDS OF INTEREST

1. Neurophysiology
2. Neuroendocrinology

PEER REVIEWED ARTICLES

1. Songtrai S, **Pratchayasakul W**, Arunsak B, Chunchai T, Kongkaew A, Chattipakorn N, Chattipakorn SC, Kaewsuwan S. Cyclosorus terminans Extract Ameliorates Insulin Resistance and Non-Alcoholic Fatty Liver Disease (NAFLD) in High-Fat Diet (HFD)-Induced Obese Rats. Nutrients. 2022 Nov 19;14(22):4895.
2. Oo TT, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Emerging roles of toll-like receptor 4 in chemotherapy-induced neurotoxicity. Neurotoxicology. 2022 Dec;93:112-127.
3. Sriwichaiin S, Apaijai N, Phrommintikul A, Jaiwongkam T, Kerdphoo S, **Pratchayasakul W**, Thongmung N, Mahantassanapong U, Vathesatogkit P, Kitiyakara C, Sritara P, Chattipakorn N, Chattipakorn SC. Increased Efficiency of Mitochondrial Coupling with a Reduction in Other Mitochondrial Respiratory Parameters in Peripheral Blood Mononuclear Cells is Observed in Older Adults. J Gerontol A Biol Sci Med Sci. 2022 Sep 23:glac201.
4. Seesen M*, **Pratchayasakul W***, Pintana H, Chattipakorn N, Chattipakorn SC. Exposure to organophosphates in association with the development of insulin resistance: Evidence from in vitro, in vivo, and clinical studies. Food Chem Toxicol. 2022 Oct;168:113389. (*Equal contribution)
5. **Pratchayasakul W**, Arunsak B, Suparan K, Sriwichaiin S, Chunchai T, Chattipakorn N, Chattipakorn SC. Combined caloric restriction and exercise provides greater metabolic and neurocognitive benefits than either as a monotherapy in obesity with or without estrogen deprivation. J Nutr Biochem. 2022 Dec;110:109125.
6. Yasom S, Watcharanurak P, Bhummaphan N, Thongsroy J, Puttipanyalears C, Settayanon S, Chalertpet K, Khumsri W, Kongkaew A, Patchsung M, Siriwattanakankul C, Pongpanich M, Pin-On P, Jindatip D, Wanotayan R, Odton M, Supasai S, Oo TT, Arunsak B, **Pratchayasakul W**, Chattipakorn N, Chattipakorn S, Mutirangura A. The roles of HMGB1-produced DNA gaps in DNA protection and aging biomarker reversal. FASEB Bioadv. 2022 Mar 28;4(6):408-434.
7. Imerb N, Thonusin C, **Pratchayasakul W,** Arunsak B, Nawara W, Ongnok B, Aeimlapa R, Charoenphandhu N, Chattipakorn N, Chattipakorn SC. D-galactose-induced aging aggravates obesity-induced bone dyshomeostasis. Sci Rep. 2022 May 20;12(1):8580.

8. Imerb N, Thonusin C, **Pratchayasakul W**, Arunsak B, Nawara W, Aeimlapa R, Charoenphandhu N, Chattipakorn N, Chattipakorn SC. Hyperbaric oxygen therapy improves age induced bone dyshomeostasis in non-obese and obese conditions. Life Sci. 2022 Feb 16;295:120406.
9. Oo TT, Sumneang N, Ongnok B, Arunsak B, Chunchai T, Kerdphoo S, Apaijai N, **Pratchayasakul W**, Liang G, Chattipakorn N, Chattipakorn SC. L6H21 protects against cognitive impairment and brain pathologies via toll-like receptor 4-myeloid differentiation factor 2 signalling in prediabetic rats. Br JPharmacol. 2022 Mar;179(6):1220-1236
10. Sumneang N, Oo TT, Singhanat K, Maneechote C, Arunsak B, Nawara W, **Pratchayasakul W**, Benjanuwattra J, Apaijai N, Liang G, Chattipakorn SC, Chattipakorn N. Inhibition of myeloid differentiation factor 2 attenuates cardiometabolic impairments via reducing cardiac mitochondrial dysfunction, inflammation, apoptosis and ferroptosis in prediabetic rats. Biochim Biophys Acta Mol Basis Dis. 2022 Feb 1;1868(2):166301.
11. Kangwan N, **Pratchayasakul W**, Kongkaew A, Pintha K, Chattipakorn N, Chattipakorn SC. Perilla Seed Oil Alleviates Gut Dysbiosis, Intestinal Inflammation and Metabolic Disturbance in Obese-Insulin-Resistant Rats. Nutrients. 2021 Sep 9;13(9):3141.
12. Vongsfak J*, **Pratchayasakul W***, Apaijai N, Vaniyapong T, Chattipakorn N, Chattipakorn SC. The Alterations in Mitochondrial Dynamics Following Cerebral Ischemia/Reperfusion Injury. Antioxidants (Basel). 2021 Aug 30;10(9):1384. (*Equal contribution)
13. Bo-Htay C, Shwe T, Jaiwongkam T, Kerdphoo S, **Pratchayasakul W**, Pattarasakulchai T, Shinlapawittayatorn K, Chattipakorn SC, Chattipakorn N. Hyperbaric oxygen therapy effectively alleviates D-galactose-induced-age-related cardiac dysfunction via attenuating mitochondrial dysfunction in pre-diabetic rats. Aging (Albany NY). 2021 Apr 16;13(8):10955-10972.
14. Shwe T, Bo-Htay C, Ongnok B, Chunchai T, Jaiwongkam T, Kerdphoo S, Kumfu S, **Pratchayasakul W**, Pattarasakulchai T, Chattipakorn N, Chattipakorn SC. Hyperbaric oxygen therapy restores cognitive function and hippocampal pathologies in both aging and aging-obese rats. Mech Ageing Dev. 2021 Apr;195:111465.
15. **Pratchayasakul W**, Jinawong K, Pongkan W, Jaiwongkam T, Arunsak B, Chunchai T, Tokuda M, Chattipakorn N, Chattipakorn SC. Not only metformin, but also D-allulose, alleviates metabolic disturbance and cognitive decline in prediabetic rats. Nutr Neurosci. 2020 Nov 5:1-13. (Impact Factor = 4.028)
16. Saiyasit N, Chunchai T, Jaiwongkam T, Kerdphoo S, Apaijai N, **Pratchayasakul W**, Sripetchwandee J, Chattipakorn N, Chattipakorn SC. Neurotensin receptor 1 agonist provides neuroprotection in pre-diabetic rats. J Endocrinol. 2020 Oct 1 (Impact Factor = 4.490)
17. Pongkan W, Jinawong K, **Pratchayasakul W**, Jaiwongkam T, Kerdphoo S, Tokuda M, Chattipakorn SC, Chattipakorn N. D-allulose provides cardioprotective effect by attenuating cardiac mitochondria dysfunction in obesity-induced insulin-resistant rats. Eur J Nutr. 2020 Oct 3. (Impact factor = 4.664)
18. Oo TT, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Potential Roles of Myeloid Differentiation Factor 2 on Neuroinflammation and Its Possible Interventions. Mol Neurobiol. 2020 Nov;57(11):4825-4844. (Impact Factor = 4.5)

19. Chunchai T, Keawtep P, Arinno A, Saiyasit N, Prus D, Apaijai N, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. A combination of an antioxidant with a prebiotic exerts greater efficacy than either as a monotherapy on cognitive improvement in castrated-obese male rats. Metab Brain Dis. 2020 Jul 16. (Impact Factor = 2.726)
20. Amput P, Palee S, Arunsak B, **Pratchayasakul W**, Kerdphoo S, Jaiwongkam T, Chattipakorn SC, Chattipakorn N. PCSK9 inhibitor effectively attenuates cardiometabolic impairment in obese-insulin resistant rats. Eur J Pharmacol. 2020 Sep 15;883:173347 (Impact Factor = 3.263)
21. Amput P, Palee S, Arunsak B, **Pratchayasakul W**, Thonusin C, Kerdphoo S, Jaiwongkam T, Chattipakorn SC, Chattipakorn N. PCSK9 inhibitor and atorvastatin reduce cardiac impairment in ovariectomized prediabetic rats via improved mitochondrial function and Ca2+ regulation. J Cell Mol Med. 2020 Jul 6;24(16):9189-203. (Impact Factor = 4.658)
22. Arunsak B, **Pratchayasakul W***, Amput P, Chattipakorn K, Tosukhowong T, Kerdphoo S, Jaiwongkum T, Thonusin C, Palee S, Chattipakorn N, Chattipakorn SC. Proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor exerts greater efficacy than atorvastatin on improvement of brain function and cognition in obese rats. Arch Biochem Biophys. 2020 Aug 15;689:108470. (***Co-first author**; Impact Factor = 3.559)
23. Thonusin C, Pantiya P, Jaiwongkam T, Kerdphoo S, Arunsak B, Amput P, Palee S, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. A proprotein convertase subtilisin/kexin type 9 inhibitor provides comparable efficacy with lower detriment than statins on mitochondria of oxidative muscle of obese estrogen-deprived rats. Menopause. 2020 Oct;27(10):1155-1166. (Impact Factor = 2.942)
24. Shwe T, Bo-Htay C, Leech T, Ongnok B, Jaiwongkum T, Kerdphoo S, Palee S, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. D-galactose-induced aging does not cause further deterioration in brain pathologies and cognitive decline in the obese condition. Exp Gerontol. 2020 Sep;138:111001. (Impact = Factor 3.376)
25. Jinawong K, Apaijai N, Wongsuchai S, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Necrostatin-1 Mitigates Cognitive Dysfunction in Prediabetic Rats With No Alteration in Insulin Sensitivity. Diabetes. 2020 Jul;69(7):1411-1423. (Impact Factor = 7.199)
26. Saiyasit N, Chunchai T, Prus D, Suparan K, Pittayapong P, Apaijai N, **Pratchayasakul W**, Sripetchwandee J, Chattipakorn N, Chattipakorn SC. Gut dysbiosis develops before metabolic disturbance and cognitive decline in high-fat diet-induced obese condition. Nutrition. 2019 Aug 28;69:110576. (Impact Factor = 3.639)
27. Palee S, Jaiwongkam T, Kerdphoo S, **Pratchayasakul W**, Chattipakorn SC, Chattipakorn N. Exercise with calorie restriction improves cardiac function via attenuating mitochondrial dysfunction in ovariectomized prediabetic rats. Exp Gerontol. 2020 Jul 1;135:110940. (Impact = Factor 3.376)
28. Thonusin C, Apaijai N, Jaiwongkam T, Kerdphoo S, Arunsak B, Amput P, Palee S, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. The comparative effects of high dose atorvastatin and proprotein convertase subtilisin/kexin type 9 inhibitor on the mitochondria of oxidative muscle fibers in obese-insulin resistant female rats. Toxicol Appl Pharmacol. 2019 Nov 1;382:114741. (Impact Factor = 3.585)
29. Chunchai T, Keawtep P, Arinno A, Saiyasit N, Prus D, Apaijai N, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. N-acetyl cysteine, inulin and the two as a combined

therapy ameliorate cognitive decline in testosterone-deprived rats. Aging (Albany NY). 2019 Jun 3;11(11):3445-3462. (Impact Factor = 5.515)

30. Keawtep P, **Pratchayasakul W***, Arinno A, Apaijai N, Chunchai T, Kerdphoo S, Jaiwongkum T, Chattipakorn N, Chattipakorn SC. Combined dipeptidyl peptidase-4 inhibitor with low-dose testosterone exerts greater efficacy than monotherapy on improving brain function in orchiectomized obese rats. Exp Gerontol. 2019 Aug;123:45-56. (***Co-first author**; Impact Factor = 3.080)
31. Sivasinprasan S, Palee S, Chattipakorn K, Jaiwongkam T, Apaijai N, **Pratchayasakul W**, Chattipakorn S, Chattipakorn N. N-acetylcysteine with low-dose estrogen reduces cardiac ischemia-reperfusion injury. J Endocrinol. 2019 May 1. (Impact Factor = 4.381)
32. Pattanakuhar S, Sutham W, Sripetchwandee J, Minta W, Mantor D, Palee S, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Combined exercise and calorie restriction therapies restore contractile and mitochondrial functions in skeletal muscle of obese-insulin resistant rats. Nutrition. 2019 Jun;62:74-84. (Impact Factor = 3.592)
33. Palee S, Minta W, Mantor D, Sutham W, Jaiwongkam T, Kerdphoo S, **Pratchayasakul W**, Chattipakorn SC, Chattipakorn N. Combination of exercise and calorie restriction exerts greater efficacy on cardioprotection than monotherapy in obese-insulin resistant rats through the improvement of cardiac calcium regulation. Metabolism. 2019 May;94:77-87. (Impact Factor = 6.513)
34. Sripetchwandee J, Pintana H, Sa-Nguanmoo P, Boonnag C, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Comparative effects of sex hormone deprivation on the brain of insulin-resistant rats. J Endocrinol. 2019 Jan 1 (Impact Factor = 3.080)
35. Arinno A, Apaijai N, Kaewtep P, Pratchayasakul W, Jaiwongkam T, Kerdphoo S, Chattipakorn S, Chattipakorn N. Combined low-dose testosterone and vildagliptin confers cardioprotection in castrated obese rats. J Endocrinol. 2019 Jan 1. (Impact Factor = 4.381)
36. Chunchai T, Apaijai N, Keawtep P, Mantor D, Arinno A, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Testosterone deprivation intensifies cognitive decline in obese male rats via glial hyperactivity, increased oxidative stress, and apoptosis in both hippocampus and cortex. Acta Physiol (Oxf). 2018 Dec 3:e13229. (Impact Factor = 5.868)
37. Palee S, Minta W, Mantor D, Sutham W, Kerdphoo S, **Pratchayasakul W**, Chattipakorn SC, Chattipakorn N. Estrogen deprivation aggravates intracellular calcium dyshomeostasis in the heart of obese-insulin resistant rats. J Cell Physiol. 2019 May;234(5):6983-6991. (Impact Factor = 4.522)
38. Apaijai N, Arinno A, Palee S, Pratchayasakul W, Kerdphoo S, Jaiwongkam T, Chunchai T, Chattipakorn SC, Chattipakorn N. High-Saturated Fat High-Sugar Diet Accelerates Left-Ventricular Dysfunction Faster than High-Saturated Fat Diet Alone via Increasing Oxidative Stress and Apoptosis in Obese-Insulin Resistant Rats. Mol Nutr Food Res. 2019 Jan;63(2):e1800729. (Impact Factor = 4.643)
39. Sutham W, Sripetchwandee J, Minta W, Mantor D, Pattanakuhar S, Palee S, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Ovariectomy and obesity have equal impact in causing mitochondrial dysfunction and impaired skeletal muscle contraction in rats. Menopause. 2018 Jul 9. (Impact Factor = 3.673)
40. Sa-Nguanmoo P, Tanajak P, Kerdphoo S, Jaiwongkam T, Wang X, Liang G, Li X, Jiang C, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. FGF21 and DPP-4 inhibitor

equally prevents cognitive decline in obese rats. Biomed Pharmacother. 2018 Jan;97:1663-1672. (Impact Factor = 3.457)

41. Mantor D, **Pratchayasakul W***, Minta W, Sutham W, Palee S, Sripetchwandee J, Kerdphoo S, Jaiwongkum T, Sriwichaiin S, Krintratun W, Chattipakorn N, Chattipakorn SC. Both oophorectomy and obesity impaired solely hippocampal-dependent memory via increased hippocampal dysfunction. Exp Gerontol. 2018 Jul 15;108:149-158. (***Co-first author**; Impact Factor = 3.224)
42. **Pratchayasakul W**, Thongnak LO, Chattipakorn K, Lungaphin A, Pongchaidecha A, Satjaritanun P, Jaiwongkam T, Kerdphoo S, Chattipakorn SC. Atorvastatin and insulin equally mitigate brain pathology in diabetic rats. Toxicol Appl Pharmacol. 2018 Mar 1;342:79-85(Impact Factor = 3.616)
43. Minta W, Palee S, Mantor D, Sutham W, Jaiwongkam T, Kerdphoo S, **Pratchayasakul W**, Kumfu S, Chattipakorn SC, Chattipakorn N. Estrogen deprivation aggravates cardiometabolic dysfunction in obese-insulin resistant rats through the impairment of cardiac mitochondrial dynamics. Exp Gerontol. 2018 Mar;103:107-114. (Impact Factor = 3.224)
44. Chunchai T, Thunapong W, Yasom S, Wanchai K, Eaimworawuthikul S, Metzler G, Lungkaphin A, Pongchaidecha A, Sirilun S, Chaiyasut C, **Pratchayasakul W**, Thiennimitr P, Chattipakorn N, Chattipakorn SC. Decreased microglial activation through gut-brain axis by prebiotics, probiotics, or synbiotics effectively restored cognitive function in obese-insulin resistant rats. J Neuroinflammation. 2018 Jan 9;15(1):11. (Impact Factor = 5.193)
45. Shwe T, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. Role of D-galactose-induced brain aging and its potential used for therapeutic interventions. Exp Gerontol. 2018 Jan;101:13-36. (Impact Factor = 3.224)
46. Sa-Nguanmoo P, Tanajak P, Kerdphoo S, Jaiwongkam T, **Pratchayasakul W**, Chattipakorn N, Chattipakorn SC. SGLT2-inhibitor and DPP-4 inhibitor improve brain function via attenuating mitochondrial dysfunction, insulin resistance, inflammation, and apoptosis in HFD-induced obese rats. Toxicol Appl Pharmacol. 2017 Oct 15;333:43-50. (Impact Factor = 3.616)
47. Pintana H, Apaijai N, Kerdphoo S, **Pratchayasakul W**, Sripetchwandee J, Suntornsaratoon P, Charoenphandhu N, Chattipakorn N, Chattipakorn SC. Hyperglycemia induced the Alzheimer's proteins and promoted loss of synaptic proteins in advanced-age female Goto-Kakizaki (GK) rats. Neurosci Lett. 2017 Aug 10;655:41-45. (Impact Factor = 2.159)
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